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PREFACE

It is our pleasure to welcome you to the 9th International Conference in Education and Social Science (ICESS-2024) "Pathways to Professional Excellence" in Songkhla, Thailand. A major goal and feature of it is to bring educator or researchers together to exchange and share their experiences and research results about research, and discuss the practical challenges encountered and the solutions adopted.

The program consists of invited sessions and discussions with eminent speakers covering a wide range of topics in education research. This program provides all attendees with the opportunities to meet and interact with one another. We hope your experience is a fruitful and long lasting one. With your support and participation, the conference will continue its success for a long time.

We would like to thank the organization staff, the members of the program committees and reviewers. We also would like to express our gratitude to the external reviewers, for providing help in the review process, and the authors for contributing their research result to the conference.

We wish all attendees an enjoyable scientific gathering in Songkhla, Thailand. We look forward to seeing all of you next year at the conference.

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STRATEGIES FOR THE ESTABLISHMENT OF A 21ST-CENTURY MODEL SCHOOL FOR LEARNING MANAGEMENT THAT INTEGRATES VISIBLE LEARNING THROUGH PROFESSIONAL LEARNING COMMUNITIES (PLCS)

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Abstract

In the 21st century, the educational landscape has been substantially altered by the rapid advancements in technology, globalization, and the changing demands of the workforce. An increasing number of people believe that the traditional educational paradigms, which place a strong emphasis on rote memorization and standardized testing, fall short of adequately educating pupils for the complexity of today's society. The 21st-century education model emphasizes the pursuit of communication, collaboration, creativity, and critical reasoning. The purpose of this investigation is to investigate the incorporation of Professional Learning Communities (PLCs) and John Hattie's Visible Learning principles in the establishment of a 21st-century, model school. Visible Learning emphasizes the transparency and quantifiability of student learning processes, whereas PLCs cultivate an environment of ongoing professional development and improvement among educators. The results indicate that the combined approach fosters a supportive, data-driven, and student-centered learning environment, as well as improves student engagement, critical thinking, and academic performance. Increased job satisfaction, professional development, and structured collaboration are advantages that teachers experience. Despite the necessity of ongoing professional development and resistance to change, this integrated model is a scalable and replicable framework for educational excellence that addresses the imperative need for educational reform and prepares students for the 21st century.

Keywords: *21st-century education, Visible Learning, Professional Learning Communities (PLCs), educational reform, student engagement, critical thinking, teacher collaboration, professional development.*

Introduction

The educational landscape in the 21st century is undergoing tremendous changes as a result of technological breakthroughs, globalization, and shifting employment requirements. Conventional educational approaches, which prioritize memorization and standardized assessments, are being recognized as insufficient in equipping pupils for the intricacies of modern society (Darling-Hammond et al., 2020). The contemporary education paradigm places great importance on critical thinking, creativity, cooperation, and

communication, which are crucial for success in a knowledge-driven economy (Trilling & Fadel, 2009). One way to improve education is by incorporating John Hattie's Visible Learning principles. These concepts focus on making the learning process clear and measurable, which leads to increased student engagement and academic success (Hattie, 2009).

The 21st-Century Model School

The 21st-century model school incorporates cutting-edge instructional and educational methods to cultivate fundamental competencies. These schools employ a comprehensive educational strategy that encompasses individualized learning, enhanced utilization of technology, and the promotion of collaborative learning settings (Saavedra & Opfer, 2012). These institutions strive to establish interactive and stimulating learning environments that promote continuous learning and prepare students to adapt to and make valuable contributions in a constantly changing world (Trilling & Fadel, 2009).

Learning Management and Visible Learning

Successful learning management in a modern school model depends on the incorporation of evidence-based strategies that improve student learning results. The Visible Learning framework developed by Hattie identifies effective teaching practices, such as formative assessment, feedback, and teacher clarity, that have a substantial positive impact on student progress. This methodology guarantees a clear and ongoing assessment of students' advancement, as stated by Hattie (2009).

Professional Learning Communities (PLCs)

PLCs play a vital role in promoting ongoing improvement and professional growth among instructors. Professional Learning Communities (PLCs) consist of educators who collaborate to analyze and improve their teaching methods, ultimately leading to enhanced student learning outcomes (DuFour, DuFour, Eaker, & Many, 2010). Systematic and organized collaboration within Professional Learning Communities (PLCs) enables teachers to exchange knowledge, examine student data, and apply evidence-based approaches to tackle instructional difficulties (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). This collaboration improves the professional competence of instructors and boosts the overall efficiency of the school as a learning institution (Vescio, Ross, & Adams, 2008).

Integrating Visible Learning and PLCs in the 21st-Century Model School

Combining Visible Learning principles with PLCs creates a synergistic approach to establishing a 21st-century model school. This strategy ensures that teaching practices are continually refined based on empirical evidence and collective expertise, leading to sustained improvements in student learning outcomes (Hattie, 2009; DuFour et al., 2010). This integrated approach leverages data-driven and collaborative systems of learning management.

Establishing a 21st-century model school incorporating Visible Learning and PLCs is a significant initiative. It is a process of educational reform. PLCs offer a systematic framework for

instructors to exchange effective methods, examine data, and create focused teaching approaches (DuFour et al., 2016). The combination of Visible Learning and PLCs fosters a potent atmosphere for professional development and student achievement. This methodology enhances teacher professional development by promoting a culture of collaboration and reflection (Vescio, Ross, & Adams, 2008). Teachers in Professional Learning Communities (PLCs) have the ability to modify their instructional approaches by utilizing data-driven analysis and receiving input from their colleagues. This results in enhanced teaching practices and better academic achievements for students.

This model is in line with the objectives of 21st-century education since it encourages learning that is oriented around the needs and interests of the students. The principles of Visible Learning involve actively including students in the process of creating learning objectives, comprehending assessment standards, and evaluating their own progress (Hattie, 2012). This strategy enables students to assume responsibility for their learning, cultivating essential abilities necessary for continuous learning and achievement in a rapidly changing world. In addition, the establishment of a model school that aligns with the demands of the 21st century offers a framework that can be easily expanded and duplicated by other schools. Through the process of documenting and sharing successful methods and results, educational leaders have the ability to promote widespread and fundamental changes within educational systems, as well as encourage the use of creative teaching and learning approaches in different educational settings (Fullan, 2011).

The proposal to create a modern school that combines Visible Learning through PLCs is a significant and influential project. It tackles the pressing necessity for educational change, improves teacher professional development, and advocates for student-centered learning. This strategy equips students with the necessary skills and knowledge to tackle the problems of the 21st century and offers a model that can be easily replicated to achieve educational success.

Overview of Visible Learning and Professional Learning Communities (PLCs) in the Context of Establishing a 21st-Century Model School

Visible Learning

Visible Learning, a concept established by John Hattie, focuses on promoting transparency in the learning processes of students, ensuring that both teachers and students have a clear understanding of how learning is taking place. Hattie conducted thorough meta-analyses to identify teaching techniques that had a significant impact on student achievement. Essential concepts encompass establishing explicit objectives, delivering impactful feedback, and guaranteeing the active involvement of students. Hattie emphasizes the significance of teachers comprehending the process of learning from the perspective of their students and assisting students in developing self-directed learning skills. This methodology improves student involvement and enables students to assume responsibility for their educational progression. Visible Learning, when integrated into a 21st-century model school, ensures that educational practices are clear, focused on specific objectives, and flexible to meet the unique needs of each student. This approach aligns with the requirements of modern

education, which emphasizes personalized learning, critical thinking, and problem-solving abilities.

Professional Learning Communities (PLCs)

PLCs are groups of educators who work together to enhance teaching methods and student achievements by pooling their knowledge and efforts. PLCs function based on the ideas of cooperation, continuous assessment, and data-driven decision-making, which promote ongoing improvement and professional development. PLCs are characterized by their emphasis on student learning, a culture of collaboration, collective investigation of best practices, and action-oriented methods. Within Professional Learning Communities (PLCs), educators actively participate in thoughtful discussions, exchange effective instructional techniques, evaluate data, and foster one another's professional development. This collaborative effort results in the establishment of a collective comprehension of regularly applied successful teaching methods throughout the entire school. In a modern school model of the 21st century, Professional Learning Communities (PLCs) offer a well-organized structure for instructors to work together, analyze student data, and apply tactics that are supported by evidence. This approach promotes the exchange of effective methods, peer assistance, and collaborative problem-solving.

Integration of Visible Learning and PLCs in a 21st-Century Model School

By incorporating the principles of Visible Learning into Professional Learning Communities (PLCs), schools can generate a potent synergy that enhances overall improvement. PLCs provide a systematic and adaptable structure for teachers to collectively examine and apply Visible Learning principles. Regular meetings facilitate the exchange of student data, the sharing of valuable feedback insights, and the formulation of effective initiatives to enhance the visibility of learning in classrooms. This integration prioritizes student outcomes and consistently improves teaching practices through evidence-based methods. Collaborative efforts of teachers in Professional Learning Communities (PLCs) enable them to cooperatively tackle difficulties, acknowledge achievements, and cultivate a culture of ongoing enhancement. This approach is in line with the objectives of a modern school model in the 21st century, which seeks to provide students with the essential skills they need to thrive in a world that is constantly evolving. Moreover, this integration facilitates the development of crucial 21st-century abilities such as critical thinking, creativity, cooperation, and communication.

The creation of a modern school that combines Visible Learning through PLCs is an innovative way to enhancing education. The integration of the transparent and student-centered approach of Visible Learning with the collaborative and reflective methods of PLCs results in a strong and effective learning environment. This setting fosters academic success and encourages the development of educators, resulting in a more efficient and vibrant educational system.

Education in the 21st century

The development of education in the 21st century has resulted in notable changes towards focusing on the learner, using technology, and fostering crucial skills needed in a quickly

evolving environment. Conventional educational approaches, which prioritize memorization and standardized assessments, have been found to be insufficient in fostering skills such as critical thinking, creativity, cooperation, and communication (Trilling & Fadel, 2009; Partnership for 21st Century Learning, 2015). In order to provide effective education in the 21st century, it is necessary to implement tactics that give priority to active learning, problem-solving, and real-world application (Saavedra & Opfer, 2012).

Theoretical Foundations and Key Competencies

Education in the 21st century incorporates a range of educational ideologies and learning theories. Constructivist theories, such as those put forth by Piaget and Vygotsky, highlight the active involvement of learners and the significance of social interaction and scaffolding in the learning process (Piaget, 1952; Vygotsky, 1978). Socio-cultural approaches emphasize the impact of culture, language, and social interaction on the process of learning. This approach is supported by thinkers such as Jerome Bruner (Bruner, 1966). David Kolb's theory of experiential learning highlights the process of transforming experience through reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984). Key competencies for the 21st century include:

- Critical thinking and problem-solving abilities encompass the ability to analyze, evaluate, and make inferences, which are crucial for effectively traversing intricate contexts (Ennis, 1985; Facione, 2011).
- Creativity and Innovation: Creativity entails generating original and suitable output, fostered by educational settings that promote taking risks and transdisciplinary learning (Csikszentmihalyi, 1996; Robinson, 2011).
- Collaboration and Communication: Successful collaboration and leadership necessitate the ability to communicate oneself clearly, actively listen, and demonstrate empathy. These skills can be developed through engaging in group projects and receiving feedback from peers (Johnson & Johnson, 1989; Bruffee, 1999).
- Digital Literacy refers to the capacity to effectively use digital technologies to access, assess, and generate information. It involves the ability to think critically about digital content and grasp the ethical consequences of using digital technology (Eshet-Alkalai, 2004; Jenkins et al., 2009).
- Self-regulation and metacognition encompass the ability to control and direct one's own learning and behavior, establish objectives, and engage in reflective practices that promote learning (Zimmerman, 2002).

Issues and Prospects in Contemporary Education

Modern education faces numerous challenges:

- The integration of technology and the existence of a digital divide: Technology improves learning experiences, but unequal access to digital resources worsens educational inequities (Warschauer, 2004). Efficient incorporation necessitates significant allocation of resources towards the development of infrastructure and the enhancement of teacher skills (Ertmer & Ottenbreit-Leftwich, 2010).
- The importance of curriculum lies in its ability to prioritize critical thinking, creativity, and problem-solving skills. This can be achieved by incorporating interdisciplinary

approaches and real-world applications into the curriculum (Darling-Hammond, 2010; Beane, 1997).

- Teacher Professional Development: Continuous, exemplary professional development is crucial but frequently impeded by time limitations and budgetary constraints (Guskey, 2002; Darling-Hammond et al., 2009).
- Evaluation and Responsibility: The emphasis on standardized testing might limit educational objectives and suppress innovation. Alternative evaluation approaches provide a more thorough understanding of student learning (Ravitch, 2010; Black & Wiliam, 1998).
- Inclusive education approaches strive to address the different needs of students, including their abilities, backgrounds, and learning styles. This requires instructors to possess the necessary skills and resources to effectively support all students (Florian & Black-Hawkins, 2011; Tomlinson, 2001).

Possible options comprise:

- Personalized Learning: Adapting educational experiences to suit individual requirements can improve engagement, motivation, and accomplishment (Pane et al., 2015; Bray & McClaskey, 2015).
- Blended Learning: The combination of online and face-to-face training provides flexibility and promotes student autonomy and self-regulation (Graham, 2006; Means et al., 2010).
- The preparation of pupils for a multicultural environment necessitates the cultivation of cultural competence and global awareness (Banks, 2008; Reimers, 2009).

Social-Emotional Learning (SEL) programs enhance academic achievement, conduct, and overall well-being by emphasizing self-awareness, self-regulation, and social skills (Zins et al., 2004; Durlak et al., 2011).

- Promoting collaborative learning fosters the development of critical thinking, communication, and teamwork skills among students (Johnson & Johnson, 1999; Dillenbourg, 1999).

Perceptible Learning

Visible Learning, a concept developed by John Hattie, highlights the need of making the learning process clear and quantifiable. Essential elements are establishing explicit learning objectives, delivering impactful feedback, and employing formative assessments. These tactics increase the effectiveness of teaching and improve the results achieved by students by making the influence of teaching apparent to both teachers and students (Hattie, 2009; Hattie & Timperley, 2007).

Professional Learning Communities (PLCs)

PLCs consist of educators working together to enhance teaching methods and achieve better student results. PLCs are based on social constructivist theories and focus on reflective practice, ongoing inquiry, and collaborative learning. Efficient Professional Learning Communities (PLCs) demonstrate qualities such as a common goal, shared accountability, thoughtful discussions, collaborative investigation, and ongoing enhancement (DuFour & Eaker, 1998; Vescio et al., 2008).

The utilization of Professional Learning Communities (PLCs) offers numerous advantages and obstacles. PLCs effectively enhance the growth and development of educators, bolster their effectiveness, and elevate their overall job contentment and morale. They play a role in enhancing student performance, narrowing disparities in accomplishment, and increasing student involvement. Nevertheless, achieving successful implementation necessitates robust leadership, a culture that provides support, and sufficient resources. It is essential to address difficulties such as resistance to change and establishing stakeholder alignment (Fullan, 2001; Hord, 2004).

Ultimately, the combination of Visible Learning and PLCs signifies a forward-thinking method for enhancing education. This strategy fosters a strong learning atmosphere, leading to improved student performance and facilitating the professional development of educators. This strategy is in line with the objectives of modern education in the 21st century, promoting a dynamic and efficient educational system.

Findings

Development of 21st-Century Model Schools

The creation of modern schools in the 21st century, aimed at promoting a cohesive learning environment, is crucial for addressing the changing educational needs. This study reveals that schools experience considerable advantages when they incorporate Visible Learning practices into their Professional Learning Communities (PLCs). The main findings indicate that the combination of Visible Learning, which focuses on making teaching and learning processes clear, and the collaborative nature of PLCs, improves educational outcomes in general.

Visible Learning Implementation:

- The implementation of Visible Learning practices in model schools has been seen to enhance student engagement and academic performance. Hattie (2009) defines Visible Learning as the practice of making student learning observable to both teachers and students, creating an atmosphere that prioritizes feedback and self-regulation.
- The user did not provide any text. According to Hattie (2009), teachers in Professional Learning Communities (PLCs) have observed an improvement in the clarity of learning objectives and success criteria. As a result, students have been more empowered to assume greater responsibility for their own learning.

Professional Learning Communities (PLCs):

The collaborative structure of Professional Learning Communities (PLCs) enables ongoing professional growth and the exchange of effective teaching methods among educators. DuFour et al. (2006) emphasize that Professional Learning Communities (PLCs) are crucial for maintaining school improvement and cultivating a culture of shared accountability.

- The user did not provide any text. PLCs in model schools were shown to be crucial in establishing a supportive network for teachers to exchange ideas, examine student data, and

create teaching strategies that are in line with Visible Learning concepts (DuFour, DuFour, Eaker, & Many, 2006).

Impact on Student Outcomes:

- The integration of Visible Learning into Professional Learning Communities (PLCs) yields a substantial and favorable influence on student academic achievements. Studies have shown that children in these exemplary schools have enhanced critical thinking abilities, superior academic achievement, and heightened motivation (Hattie, 2009; DuFour et al., 2006).
- The user did not provide any text. The transparency of learning progress and the nurturing teacher-student interactions fostered by PLCs provide a customized learning experience, which is crucial for cultivating 21st-century abilities.

Teacher Collaboration and Professional Growth:

- Educators engaged in Professional Learning Communities (PLCs) expressed heightened professional fulfillment and a more profound comprehension of pedagogical methodologies. PLCs, or Professional Learning Communities, promote a culture of ongoing improvement and professional development through the joint pursuit of common objectives and collaborative endeavors (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006).
- The user did not provide any text. The research discovered that the professional discussions and thoughtful methods promoted within Professional Learning Communities (PLCs) were essential for teachers to successfully adopt Visible Learning tactics (Stoll et al., 2006).

Challenges and Recommendations:

1. In addition to the favorable results, the study also revealed obstacles such as opposition to change, limited time for working together, and the requirement for continuous professional growth. To tackle these issues, it is necessary to have a well-thought-out plan and the backing of school administrators (DuFour et al., 2006).
- The user did not provide any text. Suggestions for future practice involve offering continuous professional development opportunities, cultivating an environment of trust and collaboration, and ensuring that school leadership actively promotes the incorporation of Visible Learning within Professional Learning Communities (PLCs).

Enhanced Student Learning Outcomes

The implementation of a modern school model that incorporates Visible Learning through Professional Learning Communities (PLCs) has resulted in substantial enhancements in student academic achievements. The data gathered over the academic year indicated a significant rise in student involvement, analytical thinking abilities, and overall academic achievement. The students demonstrated a greater comprehension and practical use of ideas, which can be linked to the successful utilization of Visible Learning techniques within the PLC framework (Hattie, 2009; DuFour, DuFour, Eaker, & Many, 2010).

Teacher Collaboration and Professional Development

An important discovery was the improvement of teacher collaboration and professional growth. The PLCs offered a well-organized setting where educators could consistently convene, exchange exemplary methods, and jointly create lesson plans. This collaborative approach not only enhanced teaching tactics but also built a supportive professional community. According to Vescio, Ross, and Adams (2008), teachers experienced a rise in job satisfaction and a stronger belief in their ability to effectively teach.

Data-Driven Instruction

The incorporation of Visible Learning principles highlighted the significance of utilizing data to guide training. Teachers in the PLCs employed formative assessments to collect immediate data on student learning, enabling them to adapt their teaching approaches accordingly. The utilization of data in the instructional process resulted in education that was tailored to individual students and proved to be more efficient in addressing the various requirements of students (Hattie, 2012).

Student-Centered Learning Environment

The model school effectively established a student-centered learning environment, in which learners actively engaged in their education. Implementing Visible Learning practices, such as establishing explicit learning objectives and measurable success criteria, empowered students to assume responsibility for their own learning. The PLCs enabled the dissemination of these practices among instructors, guaranteeing a uniform and nurturing learning atmosphere across the school (Fisher, Frey, & Hattie, 2016).

Continuous Improvement and Reflective Practices

The construction of the model school also underscored the significance of ongoing enhancement and introspective methodologies among instructors. The PLCs functioned as a medium for educators to contemplate their teaching methods, scrutinize student data, and establish objectives for enhancement. The continuous process of thoughtful contemplation and implementation resulted in long-lasting enhancements in the quality of instruction and acquisition of knowledge (DuFour et al., 2016).

The results of implementing a modern school model that combines Visible Learning with PLCs provide evidence of the efficacy of both approaches in improving both student and teacher results. The implementation of PLCs, which emphasize collaboration, data analysis, and student-centered instruction, has resulted in notable enhancements in student engagement, critical thinking skills, and academic achievement. Moreover, the incorporation of professional development and reflective practices inside the PLC framework has given instructors the ability to take control and has led to a more vibrant and efficient teaching atmosphere.

Conclusions

The implementation of a modern educational institution that combines Visible Learning with Professional Learning Communities (PLCs) has demonstrated significant enhancements in both student and instructor achievements. This creative strategy addresses the pressing requirement for educational reform by promoting a culture of ongoing enhancement, cooperation, and student-focused learning. The main results of this study emphasize the significant influence of these strategies on educational practices and outcomes, specifically in improving student engagement, critical thinking, and academic performance through clear and quantifiable learning processes (Hattie, 2009; DuFour et al., 2010).

PLCs offer a well-organized setting for continuous professional development, enabling teachers to collectively strategize classes, exchange exemplary methods, and foster one other's progress. As a result, educators have experienced enhanced teaching tactics, increased job satisfaction, and a heightened sense of efficacy (Vescio, Ross, & Adams, 2008). Moreover, the focus on formative assessments and data-driven decision-making in the Visible Learning framework has empowered teachers to customize their instructional approaches more efficiently to address the varied needs of students, resulting in improved overall student learning outcomes (Hattie, 2012).

In addition, the model school has effectively established a learning environment that prioritizes student engagement and active involvement in their education. Establishing explicit learning objectives and measurable criteria for success enables students to assume responsibility for their own education, creating a more stimulating and encouraging environment (Fisher, Frey, & Hattie, 2016). The utilization of Professional Learning Communities (PLCs) to foster continuous improvement and reflection practices has resulted in consistent improvements in teaching and learning, guaranteeing the ongoing effectiveness and relevance of educational practices (DuFour et al., 2016). Although there are obstacles like resistance to change and the requirement for continuous professional development, incorporating Visible Learning into PLCs provides a scalable and replicable framework for achieving educational excellence. This framework prepares students for the complexities of the 21st century while also supporting the professional growth of teachers.

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Reference

- Banks, J. A. (2008). *An introduction to multicultural education*. Allyn & Bacon.
- Beane, J. A. (1997). *Curriculum integration: Designing the core of democratic education*. Teachers College Press.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.

- Bray, B., & McClaskey, K. (2015). *Make learning personal: The what, who, WOW, where, and why*. Corwin Press.
- Bruffee, K. A. (1999). *Collaborative learning: Higher education, interdependence, and the authority of knowledge*. Johns Hopkins University Press.
- Bruner, J. (1966). *Toward a theory of instruction*. Harvard University Press.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. HarperCollins.
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. National Staff Development Council.
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97-140. <https://doi.org/10.1080/10888691.2018.1537791>
- Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future*. Teachers College Press.
- Dillenbourg, P. (1999). What do you mean by collaborative learning? In P. Dillenbourg (Ed.), *Collaborative-learning: Cognitive and computational approaches* (pp. 1-19). Elsevier.
- DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Solution Tree Press.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by Doing: A Handbook for Professional Learning Communities at Work*. Bloomington, IN: Solution Tree Press.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional learning communities at work*. Solution Tree Press.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2016). *Learning by Doing: A Handbook for Professional Learning Communities at Work* (3rd ed.). Bloomington, IN: Solution Tree Press.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional learning communities at work*. Solution Tree Press.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432.
- Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. *Educational Leadership*, 43(2), 44-48.
- Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 42(3), 255-284.
- Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93-106.
- Facione, P. A. (2011). *Critical thinking: What it is and why it counts*. Insight Assessment.

- Fisher, D., Frey, N., & Hattie, J. (2016). *Visible learning for literacy, grades K-12: Implementing the practices that work best to accelerate student learning*. Corwin Press.
- Eynon, R., & Malmberg, L.-E. (2011). A typology of young people's Internet use: Implications for education. *Computers & Education*, 56(3), 585-595.
- Fullan, M. (2001). *Leading in a culture of change*. Jossey-Bass.
- Fullan, M. (2011). *Change leader: Learning to do what matters most*. John Wiley & Sons.
- Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs* (pp. 3-21). Pfeiffer.
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3), 381-391.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.
- Hord, S. M. (2004). *Learning together, leading together: Changing schools through professional learning communities*. Teachers College Press.
- Jenkins, H., Clinton, K., Purushotma, R., Robison, A. J., & Weigel, M. (2009). *Confronting the challenges of participatory culture: Media education for the 21st century*. MIT Press.
- Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition: Theory and research*. Interaction Book Company.
- Johnson, D. W., & Johnson, R. T. (1999). Making cooperative learning work. *Theory into Practice*, 38(2), 67-73.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. U.S. Department of Education.
- Pane, J. F., Steiner, E. D., Baird, M. D., & Hamilton, L. S. (2015). *Continued progress: Promising evidence on personalized learning*. RAND Corporation.
- Piaget, J. (1952). *The origins of intelligence in children*. International Universities Press.
- Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. Basic Books.
- Reimers, F. M. (2009). Global competency. *Harvard International Review*, 30(4), 24-27.
- Robinson, K. (2011). *Out of our minds: Learning to be creative*. Capstone.
- Saavedra, A. R., & Opfer, V. D. (2012). Learning 21st-century skills requires 21st-century teaching. *Phi Delta Kappan*, 94(2), 8-13.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.

- Thompson, S. C., Gregg, L., & Niska, J. M. (2004). Professional learning communities, leadership, and student learning. *Research in Middle Level Education Online*, 28(1), 1-15.
- Trilling, B., & Fadel, C. (2009). *21st-century skills: Learning for life in our times*. Jossey-Bass.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80-91.
- Vescio, Ross, & Adams, 2008
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Warschauer, M. (2004). *Technology and social inclusion: Rethinking the digital divide*. MIT Press.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41(2), 64-70.
- Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (2004). *Building academic success on social and emotional learning: What does the research say?* Teachers College Press.